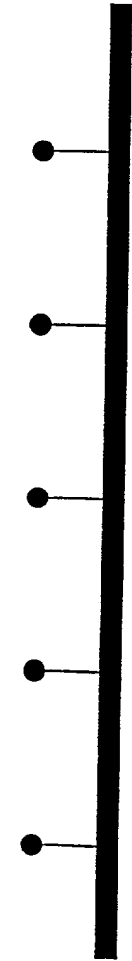


Components of specific imaged gene delivery and diagnosis system

①

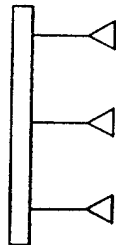


Characteristics:

- Long positively charged backbone
- Branching points
- ● = G3R7, TAT domains or other

transfection/endolysosome/nuclear targeting agents

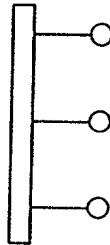
②



Characteristics:

- Short negatively charged backbone
- Branching points or conjugation points
- Δ = imaging moieties

③



Characteristics:

- Short negatively charged backbone
- Branching points or conjugation points
- ○ = variable selective targeting agent (Fab, ligand, etc.)

④



Characteristics:

- Oligo or cDNA with transgene of interest

⑤



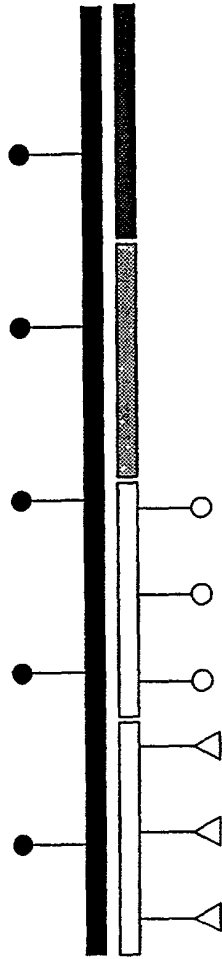
Characteristics:

- DNA encoding persistence factors

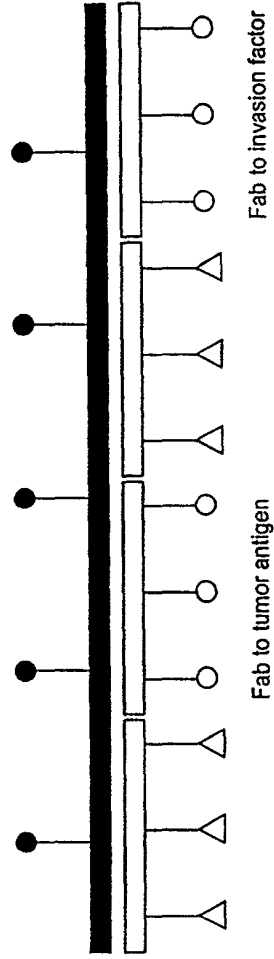
Combinations of components above give enhanced specificity ③, diagnostic imaging ②, and gene delivery ④ with high efficiency ① and persistence ⑤.

Examples of potential assembled systems

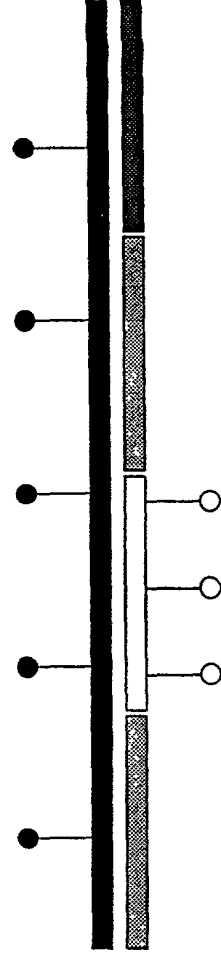
All functions



Diagnostic/prognostic imaging



Two gene/no imaging system for related genes



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Al



For more information, please contact the court clerk.

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1. *Phragmites australis* (Cav.) Trin. ex Steud.
 2. *Spartina patens* (Muhl.) Bosc.
 3. *Scirpus americanus* (L.) Pers.
 4. *Distichlis spicata* (L.) Nees
 5. *Eleocharis acicularis* (L.) Rostk Schmidt
 6. *Eleocharis obtusa* (L.) Nees
 7. *Eleocharis palustris* (L.) Rostk Schmidt
 8. *Eleocharis acicularis* (L.) Rostk Schmidt
 9. *Eleocharis obtusa* (L.) Nees
 10. *Eleocharis palustris* (L.) Rostk Schmidt
 11. *Eleocharis acicularis* (L.) Rostk Schmidt
 12. *Eleocharis obtusa* (L.) Nees
 13. *Eleocharis palustris* (L.) Rostk Schmidt
 14. *Eleocharis acicularis* (L.) Rostk Schmidt
 15. *Eleocharis obtusa* (L.) Nees
 16. *Eleocharis palustris* (L.) Rostk Schmidt
 17. *Eleocharis acicularis* (L.) Rostk Schmidt
 18. *Eleocharis obtusa* (L.) Nees
 19. *Eleocharis palustris* (L.) Rostk Schmidt
 20. *Eleocharis acicularis* (L.) Rostk Schmidt
 21. *Eleocharis obtusa* (L.) Nees
 22. *Eleocharis palustris* (L.) Rostk Schmidt
 23. *Eleocharis acicularis* (L.) Rostk Schmidt
 24. *Eleocharis obtusa* (L.) Nees
 25. *Eleocharis palustris* (L.) Rostk Schmidt
 26. *Eleocharis acicularis* (L.) Rostk Schmidt
 27. *Eleocharis obtusa* (L.) Nees
 28. *Eleocharis palustris* (L.) Rostk Schmidt
 29. *Eleocharis acicularis* (L.) Rostk Schmidt
 30. *Eleocharis obtusa* (L.) Nees
 31. *Eleocharis palustris* (L.) Rostk Schmidt
 32. *Eleocharis acicularis* (L.) Rostk Schmidt
 33. *Eleocharis obtusa* (L.) Nees
 34. *Eleocharis palustris* (L.) Rostk Schmidt
 35. *Eleocharis acicularis* (L.) Rostk Schmidt
 36. *Eleocharis obtusa* (L.) Nees
 37. *Eleocharis palustris* (L.) Rostk Schmidt
 38. *Eleocharis acicularis* (L.) Rostk Schmidt
 39. *Eleocharis obtusa* (L.) Nees
 40. *Eleocharis palustris* (L.) Rostk Schmidt
 41. *Eleocharis acicularis* (L.) Rostk Schmidt
 42. *Eleocharis obtusa* (L.) Nees
 43. *Eleocharis palustris* (L.) Rostk Schmidt
 44. *Eleocharis acicularis* (L.) Rostk Schmidt
 45. *Eleocharis obtusa* (L.) Nees
 46. *Eleocharis palustris* (L.) Rostk Schmidt
 47. *Eleocharis acicularis* (L.) Rostk Schmidt
 48. *Eleocharis obtusa* (L.) Nees
 49. *Eleocharis palustris* (L.) Rostk Schmidt
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 51. *Eleocharis obtusa* (L.) Nees
 52. *Eleocharis palustris* (L.) Rostk Schmidt
 53. *Eleocharis acicularis* (L.) Rostk Schmidt
 54. *Eleocharis obtusa* (L.) Nees
 55. *Eleocharis palustris* (L.) Rostk Schmidt
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 65. *Eleocharis acicularis* (L.) Rostk Schmidt
 66. *Eleocharis obtusa* (L.) Nees
 67. *Eleocharis palustris* (L.) Rostk Schmidt
 68. *Eleocharis acicularis* (L.) Rostk Schmidt
 69. *Eleocharis obtusa* (L.) Nees
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 71. *Eleocharis acicularis* (L.) Rostk Schmidt
 72. *Eleocharis obtusa* (L.) Nees
 73. *Eleocharis palustris* (L.) Rostk Schmidt
 74. *Eleocharis acicularis* (L.) Rostk Schmidt
 75. *Eleocharis obtusa* (L.) Nees
 76. *Eleocharis palustris* (L.) Rostk Schmidt
 77. *Eleocharis acicularis* (L.) Rostk Schmidt
 78. *Eleocharis obtusa* (L.) Nees
 79. *Eleocharis palustris* (L.) Rostk Schmidt
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 84. *Eleocharis obtusa* (L.) Nees
 85. *Eleocharis palustris* (L.) Rostk Schmidt
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 87. *Eleocharis obtusa* (L.) Nees
 88. *Eleocharis palustris* (L.) Rostk Schmidt
 89. *Eleocharis acicularis* (L.) Rostk Schmidt
 90. *Eleocharis obtusa* (L.) Nees
 91. *Eleocharis palustris* (L.) Rostk Schmidt
 92. *Eleocharis acicularis* (L.) Rostk Schmidt
 93. *Eleocharis obtusa* (L.) Nees
 94. *Eleocharis palustris* (L.) Rostk Schmidt
 95. *Eleocharis acicularis* (L.) Rostk Schmidt
 96. *Eleocharis obtusa* (L.) Nees
 97. *Eleocharis palustris* (L.) Rostk Schmidt
 98. *Eleocharis acicularis* (L.) Rostk Schmidt
 99. *Eleocharis obtusa* (L.) Nees
 100. *Eleocharis palustris* (L.) Rostk Schmidt

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A high-contrast, black and white micrograph showing a textured surface, possibly a biological specimen. The image is characterized by a grainy, mottled appearance with varying shades of gray. A prominent, dark, wavy line runs diagonally across the lower right portion of the frame, suggesting a boundary or a specific structural feature. The overall texture is irregular and complex, with many small, dark spots and lighter areas.

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Applicant: Jacob Waugh and Michael Dale

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